DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019265 Address: 333 Burma Road **Date Inspected:** 21-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Oiu Wen. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG components.

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Mr. Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA Inspector observed and/or found the following:

Bay 14:

Notification no: 007865.

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector has generated MT report for this date. The members are identified as OBG components. The weld designations MT inspected are as follows:

1) SEG3019AP-001, 002 and 003.

This QA Inspector observed the following work in progress:

OBG Seg 13BW:

Repair welding of weld joint nos: DP3133-001-024 and DP3135-001-030 [Deck Panel (DP) to DP diaphragm,

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

complete joint penetration (CJP) weld]. The welders are identified as 067588 and 045133 and were observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Qiu Wen. The welding variables recorded by this QC appeared to comply with Welding Procedure Specification (WPS): 345-SMAW-2G(2F)-Repair. Repair welding was done as per Welding Repair Report (WRR): B-WR 2422 Rev-0 and B-WR-2420 Rev-0.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3014B-123 [Floor Beam (FB) 3217 to FB web, fillet weld at panel point (PP) 122]. The welder is identified as 201583 and was observed welding in the 2F position. ZPMC QC was identified as Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2132-ESAB.

The FCAW process on weld joint no: SEG3014B-144 [FB web to Vertical Plate (VP), CJP weld at PP122]. The welder is identified as 201583 and was observed welding in the 3G position. ZPMC QC was identified as Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The SMAW process on weld joint no: SEG3014F-213 (FB to VP, CJP weld at PP121). The welder is identified as 067610 and was observed welding in the 4G position. ZPMC QC was identified as Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-TC-U4B-FCM-1.

OBG Seg 13CW:

Repair welding of weld joint nos: DP3148-001-030 (DP to DP diaphragm, CJP weld). The welder is identified as 037780 and was observed welding in the 2G position. Welding process was identified as SMAW. ZPMC QC was identified as Qiu Wen. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-2G(2F)-Repair. Repair welding was done as per WRR: B-WR 2417 Rev-0.

The SMAW process on weld joint no: SEG3015B-271 [Side Panel (SP) to VP, CJP weld at PP124 to 124.5]. The welders are identified as 066236 and 066674 and were observed welding in the 2G position. ZPMC QC was identified as Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-P-2212-B-U2-FCM-1.

OBG Seg 13AW:

Repair welding of weld joint nos: SEG3013F-006 [Longitudinal Diaphragm (LD) 3034A to FB3191A, CJP weld at PP119 + 1500]. The welder is identified as 066163 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Qiu Wen. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per Critical Welding Report (CWR): B-CWR 2507 Rev-0.

Repair welding of weld joint nos: SEG3013F-002 [Bottom Panel (BP) SA3168A FB3191A, CJP weld at PP119 + 1500]. The welder is identified as 045240 and was observed welding in the 2G position. Welding process was identified as SMAW. ZPMC QC was identified as Qiu Wen. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair. Repair welding was done as per WRR: B-WR 17560 Rev-0.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar, Sailesh	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer